

ABSTRACT

A system for executing computer programs on a target platform having a limited amount of memory. Directives are suitably placed in the computer program source code at natural boundaries. The system uses the directives to extract structural information from the computer program and to produce a description of all program objects; to estimate typical object usage; and, to trigger transparent object paging to and from the limited platform memory during execution of the computer program. The system makes paging decisions prior to runtime by using relevant factors such as the typical usage of program objects and the size of each program object.

5